

I CLAIM

5 1. A cable separator spline comprising:
 a longitudinally extending spline having a plurality of spaced
 longitudinally extending open pockets,
 a cross-section of said spline having a major axis and a minor
axis,
 at least one pocket being on the major axis, and
 at least one pocket being on the minor axis.

10 2. The spline of claim 1 wherein,
 said major axis is substantially perpendicular to said minor axis,
and
 each of said pockets longitudinally extending substantially
parallel to each other.

15 3. The spline of claim 2 wherein,
 each of said pockets have a cross-sectional area which is 75 %
or less than a cross-sectional area of a circular envelope of a cable to
be placed in said pocket.

20 4. The spline of claim 1 wherein,
 said spline has first, second, third, and fourth spaced
longitudinally extending open pockets,
 a cross-section of said spline having a major axis and a minor
axis,
 said first and second pockets having substantially the same
cross-sectional area, and
 said third and fourth pockets having substantially the same
cross-sectional area.

5. The spline of claim 4 wherein,
said major axis is substantially perpendicular to said minor axis,
said third and fourth pockets having substantially the same
cross-sectional area,
5 said first, second, third, and fourth pockets longitudinally
extending substantially parallel to each other, and
each of said pockets have a cross-sectional area which is 75 %
or less than a cross-sectional area of a circular envelope of a cable to
be placed in said pocket.

10 6. The spline of claim 5, wherein
said first and second pockets having a depth greater than a
depth of said third and fourth pockets, and
each of said pockets have a cross-sectional area of about 25%
to 75 % the cross-sectional area of the circular envelope of the cable
15 to be placed in said pocket.

20 7. A communication cable comprising:
a cable core surrounded by a jacket,
said cable core having
a longitudinally extending spline having first, second, third, and
fourth spaced longitudinally extending open pockets for
separating four twisted pair cables,
a cross-section of said spline having a major axis and a minor
axis,
25 said major axis being substantially perpendicular to said minor
axis,
said first and second pockets been diametrically spaced from
each other and being on the major axis,
a twisted pair cable having a long lay being in each of said first
and second pockets,

5 said third and fourth pockets been diametrically spaced from each other and being on the minor axis,
10 a twisted pair cable having a shot lay being in each of said third and fourth pockets,
15 said first and second pockets having substantially the same cross-sectional area,
 said third and fourth pockets having substantially the same cross-sectional area,
 each of said first, second, third, and fourth pockets longitudinally extending substantially parallel to each other,
 said first and second pockets having a depth greater than a depth of said third and fourth pockets, and
 each of said first, second, third, and fourth pockets having a cross-sectional area which is 25% to 75% of the cross-sectional area of a circular envelope of the twisted pair cable in said pocket.

20 8. A communication cable comprising:

25 a cable core surrounded by a jacket,
 said cable core having
 a longitudinally extending spline having a plurality of spaced longitudinally extending open pockets,
 a cross-section of said spline having a major axis and a minor axis,
 at least one pocket being on the major axis,
 at least one pocket being on the minor axis, and
 at least one cable in at least two of said pockets.

25 9. The communication cable of claim 8 wherein,
 said major axis is substantially perpendicular to said minor axis,
 and

each of said pockets longitudinally extending substantially parallel to each other.

5

10

15

20

25

10. The communication cable of claim 9 wherein,
each of said pockets have a cross-sectional area which is 75 % or less than a cross-sectional area of a circular envelope of the cable in said pocket.
11. The communication cable of claim 9 wherein,
said spline has first, second, third, and fourth spaced longitudinally extending open pockets,
a cross-section of said spline having a major axis and a minor axis,
said first and second pockets having substantially the same cross-sectional area, and
said third and fourth pockets having substantially the same cross-sectional area.
12. The communication cable of claim 11 wherein,
said major axis is substantially perpendicular to said minor axis,
said third and fourth pockets having substantially the same cross-sectional area,
said first, second, third, and fourth pockets longitudinally extending substantially parallel to each other,
a twisted pair cable having a cross-sectional area of a circular envelope being in each of said pockets, and
each of said pockets having a cross-sectional area which is 75 % or less than the cross-sectional area of the circular envelope of the twisted pair cable in said pocket.

13. The communication cable of claim 12, wherein
said first and second pockets having a depth greater than
a depth of said third and fourth pockets, and
each of said pockets have a cross-sectional area of about 25%
5 to 75 % the cross-sectional area of the circular envelope of the cable in
said pocket.

14. The communication cable of claim 10, wherein
a shield surrounds said core and said jacket surrounds the
shielded core.

15. The communication cable of claim 11, wherein
a shield surrounds said core and said jacket surrounds the
shielded core.

16. The communication cable of claim 13, wherein
a shield surrounds said core and said jacket surrounds the
shielded core.
15